U. S. DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS

CLINICAL THERMOMETERS

COMMERCIAL STANDARD CS1-32

A RECORDED STANDARD
OF THE INDUSTRY

Below are described some of the series of publications of the Department of Commerce which deal with various phases of waste elimination:

Simplified Practice Recommendations.

These present in detail the development of programs to eliminate unnecessary variety in sizes, dimensions, styles, and types of over 130 commodities. They also contain lists of associations and individuals who have indicated their intention to adhere to the recommendations. These simplified schedules, as formulated and approved by the industries, are indorsed by the Department of Commerce.

American Marine Standards.

These are promulgated by the American Marine Standards Committee, which is controlled by the marine industry and administered as a unit of the division of simplified practice. Their object is to promote economy in construction, equipment, maintenance, and operation of ships. In general, they provide for simplification and improvement of design, interchangeability of parts, and minimum requisites of quality for efficient and safe operation.

Commercial Standards.

These are developed by various industries under a procedure similar to that of simplified practice recommendations. They are, however, primarily concerned with considerations of grade, quality, and such other characteristics as are outside the scope of dimensional simplification.

Lists of the publications in each of the above series can be obtained by applying to the Bureau of Standards, Washington, D. C.

U. S. DEPARTMENT OF COMMERCE

R. P. LAMONT, Secretary

BUREAU OF STANDARDS

GEORGE K. BURGESS, Director

CLINICAL THERMOMETERS

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American Protestant Hospital Association, Cincinnati, Ohio.
American Sanatorium Association, New York, N. Y.
Missouri Pacific Railroad and Hospital Association, St. Louis, Mo.
National Association of Retail Druggists, Chicago, Ill.
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Indiana State Soldiers' Home Hospital, LaFayette, Ind.
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Millard Fillmore Hospital, Buffalo, N. Y.
Miller Drug Sundry Co., Baltimore, Md. (in principle).
Milwaukee Children's Hospital, Milwaukee, Wis.
Minneapolis General Hospital, Minneapolis, Minn.
Minnesota School for Feeble Minded, Faribault, Minn.
Misericordia Hospital, Philadelphia, Pa.
Moeller Instrument Co., Brooklyn, N. Y.

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Montefiore Hospital Association of Pennsylvania, Pittsburgh, Pa.
Morningside Hospital, Tulsa, Okla.
Morristown Memorial Hospital, Morristown, N. J.
Mountainside Hospital, Montclair, N. J.
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Mount Sinai Hospital of Cleveland, Cleveland, Ohio.
Muhlenberg Hospital, Plainfield, N. J.
National Thermometer Co., New York, N. Y.
Nebraska Institution for Feeble Minded, Beatrice, Nebr.
Newark City Hospital, Newark, N. J.
Newark State School, Newark, N. Y.
New Castle Hospital, New Castle, Pa.
New Hampshire, State of, Concord, N. H.
New Haven Hospital, New Haven, Conn.
New Rochelle Hospital, New Rochelle, N. Y.
Newton Hospital (Inc.), Newton Lower Falls, Mass.
New York Homeopathic Medical College and Flower Hospital, New York, N. Y.
New York Hospital, New York, N. Y.
New York Polyclinic Hospital, New York, N. Y.
New York Post-Graduate Hospital, New York, N. Y.
New York State Department of Health, Division of Laboratories and Research, Albany, N. Y. (in principle).
Niagara Falls Memorial Hospital, The, Niagara Falls, N. Y.
North Adams Hospital, North Adams, Mass.
North Carolina Orthopedic Hospital, Gastonia, N. C.
North Dakota State Hospital for the Insane, Jamestown, N. Dak.
Northern Pacific Hospital, Tacoma, Wash.
Northern Wisconsin Colony and Training School, Chippewa Falls, Wis.
Northwestern University, Chicago, Ill. (in principle).
Norton Memorial Infirmary, John N., Louisville, Ky.
Oak Park Hospital and Training School, Oak Park, Ill.
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Queen of Angels Hospital, Los Angeles, Calif.
Randall Allied Manufacturers, New York, N. Y.
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Receiving Hospital, Detroit, Mich.
Reid Memorial Hospital, Richmond, Ind.
Rhode Island State Public Welfare Commission, Howard, R. I.
Rider Co., P. L., Worcester, Mass.
Riverside County Hospital, Arlington, Calif.
Riverside Hospital, Paducah, Ky.
Rochester General Hospital, Rochester, N. Y.
Rockefeller Institute for Medical Research, The, New York, N. Y.
Rockingham Memorial Hospital, Harrisonburg, Va.
Ross (Inc.), Will, Milwaukee, Wis.
Ruckstuhl, Charles S., St. Louis, Mo.
Sacred Heart Sanitarium, Milwaukee, Wis.
Saginaw General Hospital, Saginaw, Mich.
St. Anthony's Hospital, Rock Island, Ill.
St. Barnabas Hospital, Minneapolis, Minn.
St. Catharine's Hospital, Brooklyn, N. Y.
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St. Joseph's Hospital, The, Yonkers, N. Y. (in principle).

St. Joseph Mercy Hospital, Ann Arbor, Mich.
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St. Louis Children's Hospital, St. Louis, Mo.
St. Luke's Hospital, Denver, Colo.
St. Luke's Hospital, Fargo, N. Dak.
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St. Luke's Hospital, St. Paul, Minn.
St. Luke's Hospital, Utica, N. Y.
St. Luke's Hospital and Nurses Training School, Boise, Idaho.
St. Margaret's Hospital, Kansas City, Kans.
St. Mary's Hospital, Minneapolis, Minn.
St. Mary's Hospital, Wausau, Wis.
St. Nicholas Hospital, Sheboygan, Wis.
Salem Hospital, Salem, Mass.
San Diego County Hospital, San Diego, Calif.
Santa Barbara Cottage Hospital, Santa Barbara, Calif.
Santa Fe Bureau of Public Health, Santa Fe, N. Mex.
Santa Fe Coast Lines Hospital Association, Los Angeles, Calif.
Santa Fe Hospital Association, Topeka, Kans.
Scherrer, Albert, New York, N. Y.
Schlegelmilch Bros., Long Island City, N. Y.
Schneider, R. F., Jersey City, N. J.
Scranton State Hospital, Scranton, Pa.
Schreffelin & Co., New York, N. Y.
Sealy Hospital, John, Galveston, Tex.
Seaside Hospital (St. John's Guild), New York, N. Y.
Seaside Hospital of Long Beach, The, Long Beach, Calif.
Simplification and Standardization Committee (American Hospital Association), Philadelphia, Pa.
Smith-Faus Drug Co., Salt Lake City, Utah.
Smith Pharmacal Co., Carroll Dunham, New York, N. Y.
Sonoma State Home, Eldridge, Calif.
Southern Methodist Hospital and Sanatorium, Tucson, Ariz.
Sparrow Hospital, Edward W., Lansing, Mich.
Spartanburg General Hospital, Spartanburg, S. C.
Spencer State Hospital, Spencer, W. Va.
Springfield City Hospital, Springfield, Ohio.
Springfield State Hospital, Sykesville, Md.
Sterling Thermometer Co., Brooklyn, N. Y.
Strong Memorial Hospital, Rochester, N. Y.
Stuart Circle Hospital Corporation, Richmond, Va.
Suburban General Hospital, Bellevue, Pa.
Sutter Hospital, Sacramento, Calif.
Sydenham Hospital, New York, N. Y.
Taylor Instrument Co., Rochester, N. Y.
Touro Infirmary, New Orleans, La.
Troy Hospital Association, The, Troy, N. Y.
Union Hospital, Terre Haute, Ind.
Union Hospital in Fall River, Fall River, Mass.
Uniontown Hospital, Uniontown, Pa.
United Church Hospital Association, Minneapolis, Minn.
University Hospital, Augusta, Ga.
University Hospital, Baltimore, Md.
University Hospitals, Iowa City, Iowa.
University Hospitals of Cleveland, The, Cleveland, Ohio.
University of California Hospital, San Francisco, Calif.
University of Colorado School of Medicine and Hospitals, Denver, Colo.
University of Pennsylvania, Philadelphia, Pa.
Upjohn Co., The, Kalamazoo, Mich.
Utah State Hospital, Provo, Utah.
Utica State Hospital, Utica, N. Y.
Van Amber Clinical Blanks, C. F., Watertown, N. Y.
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Waterbury Hospital, Waterbury, Conn.
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Willard Hospital, Frances E., Chicago, Ill.
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Woonsocket Hospital, Woonsocket, R. I.

Worcester City Hospital, Worcester, Mass.
Yanktown State Hospital, Yankton, S. Dak.
Youngstown Hospital Association, The, Youngstown, Ohio.

GOVERNMENT

Battle Mountain Sanatorium, Hot Springs, S. Dak.
New York General Depot, Laboratory, Medical Section, Brooklyn, N. Y.
St. Elizabeths Hospital, Washington, D. C.
Station Hospital, Fort Benning, Ga.
Station Hospital, Fort Sill, Okla. (in principle).
Station Hospital, Jefferson Barracks, Mo.
United States Marine Hospital, San Francisco, Calif.
United States Naval Hospital, Great Lakes, Ill. (in principle).
United States Soldiers' Home Hospital, Washington, D. C.
Veterans' Administration Home, Johnson City, Tenn.
Veterans' Administration, Hines, Ill.
Veterans' Administration, Milwaukee, Wis.
Veterans' Administration Hospital, North Little Rock, Ark.
Veterans' Administration Hospital, Palo Alto, Calif.
Veterans' Administration Hospital, Marion, Ind.
United States Public Health Service, Leavenworth, Kans.
National Institute of Health, United State Public Health Service, Washington, D. C.
Interior Department, Washington, D. C.
United States Treasury Department, Washington, D. C.

PROMULGATION STATEMENT FOR CLINICAL THERMOMETERS

On March 30, 1928, a general conference of representative manufacturers, distributors, users, and representatives of laboratories adopted a commercial standard for clinical thermometers which was accepted by the industry and published as Commercial Standard CS1–28.

In accordance with the recommendation of the standing committee, a recommended revision of this commercial standard was circulated on February 24, 1932, to the industry for written acceptance. The industry has since accepted this revision and approved for promulgation by the Department of Commerce, through the Bureau of Standards, the standard as shown herein, which is identified as Commercial Standard CS1–32.

The recommendation became effective for new production on June 1, 1932.

Promulgation recommended.

I. J. FAIRCHILD,
Chief, Division of Trade Standards.

Promulgated.

GEORGE K. BURGESS,
Director, Bureau of Standards.

APPROVED.

R. P. LAMONT,
Secretary of Commerce,

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COMMERCIAL STANDARD

SCOPE

This standard applies to maximum self-registering thermometers of the types commonly used for measuring body temperatures. The certificate specified in section 8 of this standard, when issued by a manufacturer, or certification by a testing laboratory that a thermometer has been found to meet the requirements of this standard, means that the thermometer has been examined and tested and has been found to meet the requirements and has passed the test specified. The requirements and tests may be outlined as follows:

1. Construction.
2. Aging.
3. Test for permanence of pigment.
4. Test for entrapped gas.
5. Test for hard shakers.
6. Tests for accuracy.
7. Test for retreating index.

The tests should be made in the order listed.

DETAIL REQUIREMENTS

1. Construction.—All thermometers shall meet the following requirements as to construction:

(*a*) The bulbs shall be made of the type of glass known as "normal" or equally satisfactory thermometric glass. Colored bulbs or bulbs blown from the material of the stem shall not be used.

(*b*) Fahrenheit thermometers shall be graduated in 0.2° F.; each degree mark and the mark at the normal point shall be longer than the intervening marks.

(*c*) Centigrade thermometers shall be graduated in 0.1° C.; each degree and half-degree mark shall be longer than the intervening marks.

(*d*) The graduation marks shall be substantially straight, regularly spaced, of uniform width, and perpendicular to the axis of the stem. The width of the marks shall be not greater than 0.012 inch nor less than 0.004 inch, but the width shall not in any case be more than one-half the length of a graduation interval. (The length of a graduation interval is the distance from the center of any graduation mark to the center of either of the adjacent marks.)

(*e*) Numerals shall be etched on the scale at even numbered degree marks on Fahrenheit thermometers and at every degree mark except as hereinafter provided on centigrade thermometers.

(*f*) There shall be not more than 10.0° F. or 5.5° C. per inch of scale.

(*g*) The range of scale shall be at least from 96.0° to 106° F. or 35.0° to 41.0° C. The 96.0° F. mark or the 35.5° C. mark shall be not less than one-half inch from the top of the constriction; that is, from the point at which the capillary resumes its normal shape above the constriction. The 106° F. or 41° C. mark shall be at least one-fourth inch from the end of the thermometer or one-fourth inch below any part of any cap attached to the thermometer.

(*h*) The normal point, except for veterinary use, shall be designated by an arrow or other suitable mark at 98.6° on Fahrenheit thermometers and in lieu of the numeral 37 on centigrade thermometers.

(*i*) Each thermometer shall bear in legibly engraved characters the name or trade-mark of the manufacturer and either a serial number, or a serial number and year, to provide complete identification.

(*j*) The marks, numerals, and identification marks shall be filled with a permanent pigment, so as to be readily legible.

(*k*) All thermometers shall be free from any defects which impair the accuracy or reliability or seriously mar the appearance.

2. Aging.—All thermometers shall be aged for a period of at least four months, after completion of the constriction, before being tested for conformity with this standard.

3. Test for permanence of pigment.—(*a*) Sample thermometers shall be immersed in a 5 per cent phenol in water solution for a period of one hour at a temperature between 70° and 90° F. without the indication of removal of the coloring matter or its appearance in the solution. All thermometers shall retain their pigment after the completion of all tests herein required.

(*b*) It is not necessary to submit each individual thermometer to the phenol test, and each thermometer of a lot may be considered to have passed or failed in this test, if representative samples taken from the lot, shall pass or fail in this test.

4. Test for entrapped gas—(*a*) *Gas in bulb.*—Thermometers in which inspection shows the presence of gas in the bulb, shall be rejected.

(*b*) *Gas in mercury column.*—The thermometers shall be shaken down if necessary and then heated so that the reading is about 96° F. or 35.5° C. and the mercury above the constriction shall be shaken toward the top of the thermometer. The bulbs shall then be heated to about 106° F. or 41° C. and the thermometers shaken down as specified under "test for hard shakers." If entrapped gas is found in the mercury column at any time after making this test, the thermometer shall be rejected.

5. Test for hard shakers.—(*a*) All thermometers, after having been heated to 106° F. or 41° C. shall be mounted in a centrifuge, and whirled at the specified speed. For a centrifuge in which the ends of the bulbs are 17 cm from the axis of rotation, the specified speed is 580 r. p. m. For a centrifuge in which the ends of the bulbs are 32 cm from the axis of rotation, the specified speed is 400 r. p. m. The larger type is preferred. When whirled at the specified speed, the index shall fall below 96° F. or 35.5° C.

(*b*) It is not necessary to heat up and shake down the thermometers especially for this test since these operations are performed during the "test for entrapped gas." The thermometers may, therefore, be examined to determine whether the index has fallen below 96° F. or 35.5° C., after they have been shaken down in the test for entrapped gas.

6. Tests for accuracy.—(*a*) Thermometers shall be compared at 98°, 102°, and 106° F. or 37°, 39°, and 41° C. with certified clinical standards by heating in a well-stirred water bath, removing from bath, and reading. Thermometers not graduated above 106° F. or

41° C. may be compared at 105.7° F. or 40.8° C. The temperature of the bath shall be raised at a substantially uniform rate during the last two minutes before the test temperature is reached, and the rise during this two-minute period shall not be less than 0.15° F. or 0.08° C., nor more than 0.20° F. or 0.11° C. The thermometers shall be removed from the bath as soon as the temperature of test is reached, except in the second test at 106° F. or 41° C., where the procedure specified under "test for retreating index" shall be followed. After removing from the bath, the thermometers are held in a horizontal position and the readings observed. A suitable magnifying glass should be used and the readings estimated to the nearest one-tenth division (graduation interval) or if preferred, to the nearest 0.01° on Fahrenheit thermometers, and recorded.[1]

(*b*) Two independent comparisons shall be made at each test point. The average of the two readings at 98° and 102° F. or 37° and 39° C. shall not differ from the corrected indications of the standard by more than 0.25° F. or 0.14° C. The average of the readings at 106° F. or 41° C. shall not differ from the corrected indications of the standard by more than 0.35° F. or 0.19° C.

(*c*) If the two readings on any one thermometer at any one test point differ by more than 0.20° F. or 0.11° C. or if the two readings at more than one test point, on any one thermometer, differ from each other by more than 0.15° F. or 0.08° C., the thermometer shall be rejected for failure to repeat readings. If the difference between the two readings at any one (and only one) test point, on any one thermometer, is more than 0.15° F. or 0.08° C., but not greater than 0.20° F. or 0.11° C., the thermometer shall be completely retested at the three test points. If in the retest, the difference between the two readings at one or more test points exceeds 0.15° F. or 0.08° C., the thermometer shall be rejected for failure to repeat readings.

(*d*) Errors in the value of an interval between adjacent test points shall not exceed 0.35° F. or 0.19° C.

7. *Test for retreating index.*—In the first test for accuracy at 106° F. or 41° C. the thermometers are removed from the bath as soon as the test temperature is reached. In the second test at

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[1] By the use of a suitable reading device, giving a magnification of about 5 times, it is a comparatively simple matter to estimate the readings so that the error in reading rarely exceeds one-tenth of a division; that is, 0.02° on Fahrenheit thermometers or 0.01° on centigrade thermometers. It has been found that estimating to one-tenth division is more rapid than estimating to the nearest 0.1°, because with the latter, there are many doubtful cases which take time to decide, while in reading to one-tenth division the observer decides quickly because he does not worry about whether the reading should be, for example, 0.04° or 0.06°, on a Fahrenheit thermometer, and simply says one or the other or, perhaps, 0.05° in such a case. In this method of reading one person reads the thermometers and another records the readings as they are called out.

In making the readings allowance should be made for the width of the graduation marks. Take, for example, a Fahrenheit thermometer in which the width of the mark is 0.4 of the length of a graduation interval. The interval is 0.2° so that the width of the mark corresponds to 0.08°. In such a thermometer, if the top of the mercury column is opposite the middle of the 102° mark, the reading would be 102°, while if it were opposite the lower edge of the mark the reading would be 101.96° and if opposite the upper edge, the reading would be 102.04°. A fine mark on a thermometer with a very open scale, say 10° F. in a scale length of 2 inches, would have a width corresponding to about 0.02° F. while the width of a broad mark on a thermometer having 10° F. to 1 inch, would correspond to about 0.1° F.

Persons not familiar with clinical thermometers can learn to read satisfactorily, estimating to one-tenth division, in a few hours; on the other hand, persons accustomed to reading clinical thermometers to the nearest 0.1° may find considerable difficulty in learning to estimate to one-tenth division. The use of the method of reading to one-tenth division is implied in the "tests for accuracy," and uniform and satisfactory use of these tests depends upon using this method of reading.

106° F. or 41° C. the bath is brought up to the test temperature and then allowed to cool slowly to 105° F. or 40.4° C. or below, at a uniform rate not exceeding 1° F. or 0.55° C. in three minutes. The thermometers are then removed from the bath and read, and the readings recorded as before. The average of the two readings on each thermometer and their difference shall be within the limits specified under "tests for accuracy."

8. *Certificate.*—(*a*) Each thermometer certified by the manufacturer shall be accompanied by a certificate which shall include the following statement:

(Place) (Date)

We, the undersigned manufacturers, hereby certify that our registering clinical thermometer marked No. —— has been examined and tested and found to meet all of the requirements and tests specified in the United States Department of Commerce Commercial Standard CS1–32 for Clinical Thermometers.

(Company)

(*b*) It is recommended that the following statements be included in the certificate:

This certificate is supported by a record of test of this thermometer. This record will be kept on file at least two years.

HISTORY OF PROJECT

On November 18, 1927, a committee representing the Associated Thermometer Manufacturers, a group of manufacturers of clinical thermometers, requested the assistance of the Bureau of Standards in establishing a commercial standard for clinical thermometers to encourage the production and sale of reliable instruments.

A commercial standard, based on tests then in use by the Bureau of Standards and modified to represent the desires of the entire industry, was established and became effective October 1, 1928.

On February 19, 1931, a well-attended meeting of the advisory committee, composed of manufacturers of clinical thermometers and representatives of the Bureau of Standards, was held in New York, N. Y., to discuss the advisability of revising the commercial standard and to suggest a desirable form of revision. An adherence survey was conducted in September of that year, resulting in a reported 79 per cent of adherence and numerous suggestions for the improvement of the standard.

A strong desire was expressed for coordination of the commercial standard with regulations enforced by various States and municipalities. Accordingly, a meeting of representatives of the standing committee with representatives of the regulatory bodies was held in New York, N. Y., on January 12, 1932. As a result of this meeting the present revision was drafted by the standing committee and circulated to the industry for acceptance.

STANDING COMMITTEE

A few changes, for the purpose of filling vacancies, have been made in the original standing committee appointed to consider annually any comment or suggestions for the improvement of the commercial standard. The personnel of this committee is now as follows:

Dr. BRADFORD NOYES, Jr., chairman, Taylor Instrument Cos., Rochester, N. Y.
W. L. CROUNSE, National Wholesale Druggists' Association, Washington, D. C
FRIEND LEE MICKLE, State department of health, Hartford, Conn.
E. F. MUELLER, Bureau of Standards, Washington, D. C.
OTTO W. SCHLEGELMILCH, Schlegelmilch Bros., Long Island City, N. Y.
P. J. PECORELLA, Pecorella Manufacturing Co., Brooklyn, N. Y.
Maj. ROBERT SKELTON, major, Medical Corps, United States Army, Army Base, Brooklyn, N. Y.
JOHN M. SMITH, Hahnemann Hospital, Philadelphia, Pa.

EFFECTIVE DATE

The effective date for new production was set for June 1, 1932.

CERTIFICATION PLAN

The certification plan as applied by the Bureau of Standards to commercial standards consists in the compilation and distribution of lists of manufacturers who are willing, when requested to do so, to certify to purchasers that products supplied by them comply with all the requirements and tests set forth in nationally recognized commercial standards. The plan is also applied to selected Federal specifications.

These lists are available on request to individual consumers, consumer groups, companies, and, in fact, to any prospective puchasers, for their guidance.

The benefits now derived from the use of specifications by large consumers are thus made immediately available to the small consumer, with incidental advantage to the larger consumers of convenience in ordering and accepting material with fewer laboratory tests. The manufacturer also benefits from the well-known economies accompanying "mass production."

The lists of manufacturers "willing to certify" to the quality of certain commodities are made by corresponding with, as nearly as possible, all the manufacturers of that product and listing only those who signify their willingness to certify to the purchaser, when requested to do so, that the commodities delivered actually comply with the commercial standard.

Obviously, the purchaser making use of the lists of "willing to certify" manufacturers will select therefrom such manufacturers as are known (or assumed) by him to be reliable.

The trend toward the purchase of materials of certified quality from sources shown on such "willing to certify" lists supplies added incentive to standardization on the part of other producers, and thus the benefits of the certification plan will be felt by purchasers either directly or indirectly, whether or not they make use of the plan themselves.

INDEXING TITLE

The self-indexing title appearing in the upper left-hand corner of front page of cover is identical with that used in the Federal Standard Stock Catalogue. The corresponding Federal Standard Stock Catalogue and Federal specification group classification is GG.

COMMERCIAL STANDARDS PROCEDURE

Industry has long recognized the value of a wide application of specifications developed and approved by nationally recognized organizations. For those desirous of securing this result the Bureau of Standards has a procedure whereby such specifications, properly indorsed, may be printed as official publications of the Department of Commerce and promulgated as "commercial standards." The cooperation of the Bureau of Standards for this purpose is available only upon written request.

The division of trade standards is not designed to act as a standardizing body, neither does it engage in the preparation of specifications. Its function is mainly coordinatory in character, since its chief mission is to invite attention to a standard or a specification which any branch of industry may recommend for promulgation on a national basis; to determine its eligibility for promulgation; to publish and broadcast it in the event the prerequisites of procedure have been met, including a satisfactory majority acceptance; to facilitate the application of the certification plan for the assurance and convenience of the purchaser; to provide means for periodic audits of adherence; and to cooperate with the Bureau of Foreign and Domestic Commerce in determining the desire of industry relative to translation and promulgation of such specifications as a basis for foreign commerce.

Commercial standardization parallels simplified practice in many respects, although there are certain fundamental differences in their objectives. In general, it may be said that a simplification covers types, sizes, and varieties of a commodity which are retained by industry on the basis of demand, whereas a commercial standard establishes definite requirements as to grade, quality, or dimensional tolerances in addition to and distinct from any limitation of variety desired and accepted by the industry.

ORGANIZATION AND DUTIES OF STANDING COMMITTEE

In order to carry on the aims and desires of the industry in the standardization of their product, a standing committee is appointed at the general conference. This committee consists of members from each division of the industry, namely, producers, distributors, and consumers, and thus reflects the well-balanced viewpoint of all concerned.

The members of the committee receive all suggestions regarding the commercial standard and consider its revision in the event that such action is desirable and mutually beneficial.

If revision is unnecessary, the commercial standard is reaffirmed in its existing form; but if any important changes are found de-

sirable, their adoption is recommended by the committee, whereupon the industry is again solicited for written acceptance of the standard in its revised form.

The committee is in effect a centralizing agency for criticisms and comments regarding the commercial standard and is charged with the responsibility of recommending revisions to keep the standard abreast with current industrial practice.

The proper functioning of the committee requires that, when necessary, its members be willing to attend meetings held at some central place, although in most cases it will be possible to conduct the work by correspondence.

When deceptions in reference to the commercial standard are reported to the standing committee, it applies moral suasion or such other corrective measures as seem desirable. The Department of Commerce has no " police power " to compel adherence, nor follow-up inspection to check conformity thereto, so it rests upon the industry itself and the standing committee to do all in its power to encourage all divisions of the industry to follow the provisions of the commercial standard and contribute in every way possible to its general adoption and usefulness.

YOUR COOPERATION

As a producer, distributor, or consumer of some of the commodities for which commercial standards have already been established, you are in a position to avail yourself of the benefits arising from the use of quality standards.

The first step is a declaration in favor of the standard by recording your intention to adhere, as closely as circumstances will allow, to the standards for those products which you may buy or sell.

The receipt of your signed acceptance will permit the listing of your company in new editions of the commercial standards that you accept.

The acceptance of a commercial standard is an entirely voluntary action and applies to the production, sale, and use of stock items. It is not meant to interfere with the introduction, manufacture, or sale of special sizes and types sometimes required, nor to restrict the ingenuity of the producer in the employment of new materials, processes, or methods.

Commercial standards may be procured singly or in quantities at a nominal price from the Superintendent of Documents, Washington, D. C. Prices will be furnished upon request.

Trade associations and individual companies often distribute large numbers of the printed standard for the information and guidance of their members or customers. In such cases it is possible to extend the scope and degree of adherence by urging each recipient to send in an acceptance, bearing in mind that the practical value of any standardization is measured by the observance it receives.

An acceptance form for the commercial standard herein covered is included on page 15.

ACCEPTANCE OF COMMERCIAL STANDARD

Please sign and return this sheet to Division of Trade Standards, Bureau of Standards, Washington, D. C.

Date_____

DIVISION OF TRADE STANDARDS,
BUREAU OF STANDARDS,
Washington, D. C.

GENTLEMEN: We, the undersigned, do hereby accept the original draft of the commercial standard, as our standard practice in the production,[1] distribution,[1] or use[1] of clinical thermometers, beginning_____, and will use our best effort in securing its general adoption.

To permit intelligent review of the effectiveness of the commercial standard every year by an accredited committee of all interests, working in cooperation with the Department of Commerce, we plan to supply all data, upon request, which may be necessary for the development of constructive revisions. It is understood that any suggested modifications will be submitted as soon as formulated, and shall not be promulgated until accepted in form similar to this recommendation.

Signature _____
(Above signature should be in ink)

(Kindly typewrite or print the following lines)

Title _____

Company _____

Street address_____

City and State_____

We are members of the following associations or other organizations interested in the production, sale, or use of clinical thermometers.

_____

_____

_____

_____

[1] Please designate which group you represent by drawing lines through the the other two. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval, the words "In principle" should be added after the signature.

(Cut on this line)

TO THE ACCEPTOR

In signing the acceptance blank, please bear the following points clearly in mind:

1. *Adherence.*—The Department of Commerce has no regulatory powers to enforce adherence to the commercial standards. Instead, this program is based on voluntary cooperation and self-government in industry. To make this specific standardization operate as a satisfactory example of self-government, it is highly desirable that it be kept distinct from any plan or method of governmental regulation or control. It will be successful according to the degree to which manufacturers, distributors, and purchasers adhere to its terms and conditions.

2. *The industry's responsibility.*—The department cooperates only on the request of the industry, and assumes no responsibility for industrial acceptance or adherence. This program was developed by the industry on its own initiative. Its success depends wholly on the active cooperation of those concerned.

3. *The acceptor's responsibility.*—You are entering into an entirely voluntary arrangement, whereby the members of the industry—the distributors and consumers of the product, and others concerned—hope to secure the benefits inherent in commercial standardization. Those responsible for this standard realize that instances may occur in which it will be necessary to supply or purchase items not included therein. The purpose is, however, to secure wider support for nationally recognized standards covering grade, quality, and other characteristics of products. Consumers can make the program a success if, in their purchasing, they will make a definite and conscientious effort to specify in terms of this commercial standard.

4. *The department's responsibility.*—The function performed by the Department of Commerce is fourfold: First, to act as a coordinator to insure adequate consideration of the needs of all interests; second, to supply such assistance and advice in the development of this program as past experience with similar programs may suggest; third, to solicit and record the extent of adoption and adherence to the standard; and fourth, to add all possible prestige to this standardization movement by publication and promulgation if and when it is adopted and accepted by all elements directly concerned.

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